### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019543

Address: 333 Burma Road **Date Inspected:** 23-Dec-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr.Zhu Zhong Hai. No **Inspected CWI report:** Yes No N/A **Rod Oven in Use:** Yes No N/A Yes N/A N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Tower and Orthotropic Box Girder (OBG)

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

### **NDT**

#### **BAY 11**

This QA Inspector performed randomly Visual Inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as OBG Bike Path. The weld designations reviewed are as follows.

BK004ASD1-019-002, 004, 024

BK004ASD1-022-002, 004, 024

BK004ASD1-034-002, 004, 024

BK004A6-023-001, 002, 165

BK004A8-023-001, 002, 007

BK004A2-023-013, 021, 002, 008

NDT Notification No-07898

This QA Inspector observed the following work in progress:



# WELDING INSPECTION REPORT

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#### **OBG TRIAL ASSEMBLY**

### OBG Segment 12AE~12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 044515, Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AE to 12 BE Deck plate to Deck plate Joint from inside. Joint identified as OBE12-003. ZPMC CWI Identified as An Qing Xiang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

# OBG Segment 12AE~12BE

This QA Inspector observed ZPMC qualified welding personnel identified as 040320 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AE to 12 BE VT repair of Side plate to Bottom plate joint bike path side. Joint identified as SEG3001A-004. ZPMC CWI Identified as An Qing Xiang with temporary welding repair report. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) FCM-Repair-1. For more information see below attached picture number 1.

#### **OBG Segment 11EE**

This QA Inspector observed ZPMC qualified welding personnel identified as 040270 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 11EE Deck plate Drip plate joint. Joint identified as OBE11E-145. ZPMC QC Identified as Wang Li Yang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2213-B-U2-FCM-1.

# **OBG Segment 11EE**

This QA Inspector observed ZPMC qualified welding personnel identified as 040270 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 11EE Deck plate Drip plate joint. Joint identified as OBE11E-146, 147. ZPMC QC Identified as Wang Li Yang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2112- FCM-1. For more information see below attached picture number 2.

#### **OBG Segment 11EE**

This QA Inspector observed ZPMC qualified welding personnel identified as 050289 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 11EE Side plate Drip plate joint. Joint identified as OBE11E-143, 144. ZPMC QC Identified as Wang Li Yang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2114-FCM-1.

#### OBG Segment 12AW ~12BW

This QA Inspector observed ZPMC qualified welding personnel identified as 040611, 046709, 040656 Perform Shielded Metal Arc Welding (SMAW) on OBG segment 12AW +12BW Bottom plate to Bottom plate joint from external side. Joint identified as OBW12B-001. ZPMC QC Identified as Zhau Peng. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

# WELDING INSPECTION REPORT

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# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone :150-0042-2372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer